Flualprazolam: Emergent Benzodiazepine Identified in Kansas

Summary:
A novel psychoactive substance (NSP), flualprazolam, has been identified in recent deaths that occurred in Kansas. NPS benzodiazepines, sometimes referred to as designer benzodiazepines, are synthetically manufactured drugs, often associated with unknown biological effects and health risks, a dangerous combination for any recreational drug user. NPS benzodiazepines resemble traditional benzodiazepines, such as diazepam and alprazolam, but differ with the addition of new elements or functional groups. NPS benzodiazepines are often prepared in powder or tablet form and can be mixed with street level drugs, including traditional benzodiazepines and opioids.

Flualprazolam was first identified in the United State in March 2018, however the popularity of flualprazolam has increased. Postmortem toxicology testing has revealed flualprazolam combined with fentanyl in recent deaths in Kansas.

Recommendations for Clinicians:
• Please share this health alert broadly with health care providers in your area.
• Become familiar with the signs and symptoms associated with benzodiazepine intoxication/overdose (e.g., sedation, amnesia, drowsiness, etc.).
• Be aware that clinical effects produced by NPS benzodiazepines could differ from those of conventional benzodiazepines (i.e., strong sedation and amnesia at low doses due to the high potency, loss of coordination, dizziness, blurred vision, and slurred speech).
• NPS benzodiazepines are often sold or ingested in combination with other substances (e.g., opioids). Be mindful that illicit drugs have limited quality control that often impact the expected clinical effects.
• Counsel about the dangers of NPS benzodiazepine products and other drugs.

Recommendations for MEs & Coroners:
• Test for new benzodiazepines and their biomarkers in suspected overdose cases.
• Be aware that ELISA screening for NPS benzodiazepines may not be able to detect the newest generation of compounds; consider mass spectrometry-based screening.
• Be aware that concentrations of NPS benzodiazepines in biological specimens can vary. GC-MS sensitivity may not be adequate. Accurate interpretation of findings may be linked to case history.

For More Information:
• For assistance with management of patients suspected of illness related to recreational, illicit, or other drugs: Call your local poison control center at: 1-800-222-1222.
• To learn more about overdose prevention efforts in Kansas, visit: preventoverdoseks.org
• Information in this alert was provided by the Center for Forensic Science Research and Education. The full report can be viewed at: https://www.npsdiscovery.org/wp-content/uploads/2019/12/Public-Alert_Fluvalprazolam_NPS-Discovery_120519.pdf

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